



2006 Minerals Yearbook

IRAQ

THE MINERAL INDUSTRY OF IRAQ

By Philip M. Mobbs

Hydrocarbon production dominated the national economy of Iraq, which continued to be adversely affected by the insurgency that had engulfed the country since the 2003 military action by the United States and coalition forces. Problems with electrical power availability, security, and transportation continued to impact the rehabilitation of the country's industrial sector, especially mineral fuel production and processing. According to the Ministry of Oil, an estimated \$6.3 billion was lost (oil revenue not earned and costs to repair damage) because of 159 attacks on oil industry infrastructure in 2006 (Hafidh, 2007).

Despite the armed civil conflict, crude oil production increased in 2006. Oil revenues from Iraqi oil exports were enhanced by the increase in international crude oil prices. In 2006, the value of oil exports increased by \$6.5 billion to \$29.7 billion. Crude oil accounted for 97% of total Iraqi exports in 2006; refined petroleum, about 2%; and all other exports, about 1%. With the exception of cement, production of other mineral and mineral-based commodities was negligible (Central Bank of Iraq, 2007, p. 64).

Production

Production of crude oil and associated natural gas was estimated to have increased in 2006, as was the production of cement. Because of limited metering of the flow of produced oil, published estimates of Iraq's average daily crude oil output varied. Testimony before the U.S. Congress released by the U.S. Government Accountability Office in 2007 noted that there was a 100,000- to 300,000-barrel-per-day difference between the average Iraqi oil production data reported by the U.S. Department of Energy's Energy Information Administration and that reported by the U.S. Department of State (Christoff, 2007, p. 9, 21-22).

Structure of the Mineral Industry

The Ministry of Industry and Minerals was responsible for the nonfuel minerals sector in Iraq. Most of the larger companies that produced or processed minerals were state owned, although there were privately owned industrial mineral operations. Investment law No. 13 of 2006 paved the way to begin the privatization of the nonfuel minerals sector.

Natural gas and petroleum were produced from Iraq's oilfields by state-owned companies. Petroleum sector activity was supervised by the Ministry of Oil. The Iraq Constitution of 2005 formed the legal basis for current (2006) hydrocarbon contracts. The new hydrocarbon law, which was being drafted at yearend 2006, was expected to be introduced for Parliamentary debate in early 2007.

Commodity Review

The mineral fuels sector of Iraq is covered extensively by the U.S. Energy Information Administration (2007). Besides hydrocarbons, the known mineral resources of Iraq were minor compared with those of other countries, although the Ministry of Industry and Minerals actively promoted the rehabilitation of the mineral sector in an attempt to diversify the national economy (Al-Bassam and Hak, 2006).

Metals

Iron and Steel.—Al Tanmia, which was a subsidiary of the Shamara Holding Co. of Jordan, began the construction of a melt shop and rolling mill at Khor az-Zubair in southern Iraq. The proposed annual output of the steel plant included 300,000 metric tons of billet (Shamara Holding Co., undated).

Industrial Minerals

Cement.—In northern Iraq, a consortium that was lead by Orascom Construction Industries of Egypt commissioned one production line of the Tasluja cement plant and completed the renovation of the plant's cement mill no. 1. Rehabilitation of clinker line no. 2 and cement mills nos. 2, 3, and 4 were scheduled to be completed in early 2007. Construction continued on the 2.9-million-metric-ton-per-year-capacity Bazian Cement Plant near Hayasi. Initial production from the Bazian plant was expected to begin in late 2007 (Orascom Construction Industries, undated; World Cement, 2006).

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TABLE 1
IRAQ: ESTIMATED PRODUCTION OF MINERAL COMMODITIES^{1, 2}

(Thousand metric tons unless otherwise specified)

Commodity ³	2002	2003	2004	2005	2006
INDUSTRIAL MINERALS					
Cement, hydraulic:					
Portland	6,834 ⁴	1,901 ⁴	2,500	3,000	3,500
White	175	54 ⁴	15	15	15
Nitrogen, N content of ammonia	532 ⁴	90 ^{r, 4}	30	30	10
Phosphate rock, beneficiated, phosphorus pentoxide content	100	10	1	1	1
Salt	203 ⁴	50 ⁴	50	25	25
Sulfur, elemental:					
Native, Frasch	300	50	--	--	--
Byproduct ⁵	50	1	20	30	30
Total	350	51	20	30	30
MINERAL FUELS AND RELATED MATERIALS					
Gas, natural:					
Gross	7,000	4,000	5,000	4,000	5,000
Dry	2,900	1,500	1,800	1,500	1,800
Natural gas plant liquids	4,000	2,000	9,600 ^r	9,000 ^r	10,000
Petroleum:					
Crude, including lease condensate	740,000	490,000	737,940 ⁴	660,000 ⁴	730,000
Refinery products	170,000	50,000	140,000 ^r	100,000	140,000

^rRevised. -- Zero.

¹Estimated data are rounded to no more than three significant digits; may not add to totals shown.

²Table includes data available through October 5, 2007.

³In addition to the commodities listed, secondary aluminum, clay, fertilizers, gypsum, secondary lead, lime, limestone, industrial (glass or silica) sand, sand and gravel, and stone also may have been produced but available information is inadequate to estimate output.

⁴Reported figure.

⁵From petroleum and natural gas processing.

TABLE 2
IRAQ: STRUCTURE OF THE MINERAL INDUSTRY IN 2006

(Metric tons unless otherwise specified)

Commodity	Major operating companies and major equity owners	Location of main facilities	Annual capacity	
Cement:				
Portland	Southern Cement Co. (Government, 100%)	Al Jinoob plant, Samawa; Al Najaf Al Ashref plant, Kufa; Al Sadaa plant, near Sadat Al Hindia; Karbala plant, Karbala; Kufa I plant, Kufa; Muthena plant, near Muthena; As Samawa plant, Samawa; and Um Qasr plant, Um Qasr	7,500,000 ¹	
Do.	Iraqi Cement Co. (Government, 100%)	Al Qaim plant, Al Qaim; Al Tamim plant, Kirkuk; Fallujah plant, Fallujah; and Kubaisa plant, Kubaisa	5,200,000 ¹	
Do.	Northern Cement Co. (Government, 100%)	Badoosh I, II, and III plants, Mosul; Hammam Al Alil I and II plants, Mosul; and Sinjar plant, Mosul	3,740,000 ¹	
Do.	United Cement Co. (Kurdistan Regional Government)	Bazian plant at Sarchinar, near Hayasi	2,900,000 ²	
Do.	Tasluja Cement Plant (Kurdistan Regional Government)	Tasluja plant, near Suleimaniyah	2,300,000	
White	Iraqi Cement Co. (Government, 100%)	Fallujah White Cement plant, Fallujah	300,000 ¹	
Fertilizers	State Company for Fertilizers (Government)	Ammonia plant at Abu Al-khasib, near Basra	660,000 ¹	
Do.	do.	Urea plant at Abu Al-khasib, near Basra	1,060,000 ¹	
Do.	do.	Urea plant at Bayji	500,000	
Do.	State Enterprise for Phosphate (Government)	Phosphatic fertilizer plant at Al-Qaim	130,000 ¹	
Petroleum:				
Crude	North Oil Co. (Government)	Ain Zaleh, Ajil, Balad, Bai Hassan, East Baghdad, Jambur, Kirkuk, Sufaiya, Tikrit, and West Butmah Fields	(3)	
Do.	South Oil Co. (Government)	Abu Ghraib, Amara, Burzurgan, Fakka, Halfaya, Luhais, Majnoon, Nahr Umar, North Rumaila, South Rumaila, West Qurna, and Zubair Fields	(3)	
Refined products ⁴	42-gallon barrels per day	Midland Refineries Co. (Government)	Daura refinery at Daura	110,000 ¹
Do.	do.	North Refineries Co. (Government)	Baiji (North and Salahudin) refineries at Baiji	310,000 ¹
Do.	do.	South Refineries Co. (Government)	Basra refinery at Basra	150,000 ¹
Phosphate rock	State Enterprise for Phosphate (Government)	Akashat	NA	
Sulfur	Misraq Sulphur State Enterprise (Government)	Near Al Qayyarah	820,000 ¹	

NA Not available. -- Negligible or no production.

¹Actual production was significantly less than design capacity.

²Under construction.

³Average production capacity for all Iraqi fields in 2006 was about 2,000,000 barrels per day.

⁴In addition to the three large refineries, several small (7,000- to 10,000-barrel-per-day-capacity) topping plants were in various stages of repair. A 10,000-barrel-per-day-capacity plant at Najaf opened in 2006.